WHAT IS CLAIMED IS:

1. A method of treating a patient in need thereof comprising administration of a composition comprising cord blood or cord blood-derived stem cells, wherein said administration delivers at least 5 x 10^9 total nucleated cells.

2. The method of claim 2 wherein the cord blood or cord blood-derived stem cells are suitable for bone marrow transplantation.

3. The method of claim 2 wherein the cord blood or cord blood-derived stem cells are suitable for administration in humans.

4. The method of claim 2 wherein a plurality of the cord blood-derived stem cells express the cell surface markers CD34+ and CD38-.

cord blood stem cells.

5. The method of claim 2 wherein a plurality of the umbilical cord blood stem cells express the cell surface markers CD34+ and CD38+.

6. The method of claim 2 wherein the cord blood or cord blood-derived stem cells is treated with a growth factor.

7. The method of claim 6 wherein the growth factor is a cytokine, lymphokine, interferon, colony stimulating factor (CSF), interferon, chemokine, interleukin, human hematopoietic growth factor, hematopoietic growth factor ligand, stem cell factor, thrombopoeitin (Tpo), granulocyte colony-stimulating factor (G-CSF), leukemia inhibitory factor, basic fibroblast growth factor, placenta derived growth factor or epidermal growth factor.

8. The method of claim 6 wherein the cord blood or cord blood-derived stem cells is treated with the growth factor to induce differentiation into a plurality of cell types.

9. The method of claim 6 wherein the cord blood or cord blood-derived stem cells is treated with the growth factor to prevent or suppress differentiation into a particular cell type.

10. A method of treating myelodysplasia which comprises administering cord blood or cord blood-derived stem cells to a patient in need thereof.

11. The method of claim 1 wherein said administration delivers at least 5 x 10^9 total nucleated cells.

12. The method of claim 1 wherein said administration delivers at least 10 x 10^9 total nucleated cells.

13. The method of claim 1 wherein said administration delivers at least 20 x 10^9 total nucleated cells.

14. The method of claim 1 wherein said patient has a disease, disorder or condition that includes an inflammation component.

15. The method of claim 1 wherein said patient has a vascular disease, disorder or condition.

16. The method of claim 15 wherein said disease, disorder or condition is atherosclerosis.

17. The method of claim 1 wherein said disease, disorder or condition is a neurological disease, disorder or condition.

18. The method of claim 17, wherein said disease, disorder or condition is selected from the group consisting of amylotrophic lateral sclerosis and multiple sclerosis.

19. The method of claim 1, wherein said patient has an autoimmune disorder.

20. The method of claim 19 wherein said autoimmune disorder is selected from the group consisting of diabetes and amylotrophic lateral sclerosis.

21. The method of claim 1, wherein said condition is caused by or associated with trauma or injury.

22. The method of claim 21, where said trauma or injury is trauma or injury to the central nervous system.

23. The method of claim 21, wherein said trauma or injury is trauma or injury to the peripheral nervous system.

24. The method of claim 1, wherein said at least 5 x 10^9 total nucleated cells comprises cells derived from a plurality of donors.

25. The method of claim 1 wherein none of said cells in said composition is HLA-typed prior to said administration.

26. The method of claim 1 wherein said composition is preconditioned for between 18 hours and 21 days prior to said administration.

27. The method of claim 1 wherein said composition is preconditioned for between 48 hours and 10 days prior to said administration.

28. The method of claim 1, wherein said composition is preconditioned for between 3-5 days prior to said administration.